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George Cabrera

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07/17/2008

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EXAMINER

CORRIELUS, JEAN B

ART UNIT

PAPER NUMBER

2611

MAIL DATE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 8 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plonka US patent No. 5,757,854 in view of applicant's admitted prior art fig. 1.

Plonka teaches a method and apparatus fig. 5 comprising element 100 that inherently includes a splitter that receives and splitting an analog signal 14 for into a "visual signal" considered as the claimed "fractional portion" and "aural signal" considered as the claimed "remainder portion", see output of NTSC source 100; a combiner 120 (summer) for combining said "visual signal" (fractional portion) with a digital signal 112 to provide a first combined signal 122; and a combiner 124 see col. 4, lines 65 that combines said aural signal and said first combined signal to provide a composite RF signal 130 to be broadcasted by antenna 128. However, Plonka does not explicitly teach that the NTSC signal is a FM signal it also fails to teach a main FM transmitter for amplifying said second signal (remainder portion) to provide an amplified FM signal; a digital transmitter for amplifying said first combined signal to provide an amplified combined signal. However, applicant admitted prior art clearly teach prior a signal is combined by combiner C, a main FM transmitter 10 is used to provide an

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amplified FM signal; a digital transmitter 12 is used to provide an amplified signal. Given that fact, it would have been obvious to one skill in the art to modify Plonkain in the manner suggested by applicant's admitted prior art by amplifying the first and second signal prior to being combined in order to increase the output power so as to overcome the combiner insertion loss. See applicant's description pages 1-3 relating to the admitted prior art fig. 1. Furthermore, it is well know in the art to modulate a NTSC signal using frequency modulation. Given that fact, it would have been obvious to one skill in the art to modulate the NTSC signal using FM modulation in order to provide compatibility with existing radio receivers that may use frequency modulation so as to allow the original signal to be reconstructed.

As per claim 8, Plonka fails to teach that the digital signal is an IBOC digital signal. Applicant's admitted art however, fig. 1, teaches that the digital signal is an IBOC digital signal. Given that fact, it would have been obvious to one skill in the art to present the digital signal as an IBOC digital signal so as to provide compatibility with existing receiver that may use IBOC digital signal.

As per claim 15, see claim 1.

As per claim 16, see claim 1.

As per claim 17, Plonka and applicant's admitted prior art does not explicitly teach the further step of adjusting the phase of the visual signal (fractional signal) however, it is well know in the art t adjust phase of a signal prior to being combine to another signal. Given that it would have been obvious to one skill in the art to adjust the

phase of the visual signal (fractional signal) so as to bring the visual signal in phase alignment with second signal so as to ensure that they are properly combined.

As per claim 18, it would have been obvious to one skill in the art to manually adjust the phase of the first signal (fractional signal) and the motivation to do so would have been the same as provided above with respect to claim 17.

As per claim 19, see claim 8.

As per claim 20, see claim 17.

Allowable Subject Matter

3. Claims 2-7 and 9-14 are allowed.

Response to Arguments

4. Applicant's arguments filed 4/25/08 have been fully considered but they are not persuasive. It is alleged that there is no motivation to amplify both analog signal obtained from the FM source and a digital signal obtained from a digital source. However, it is noted that the invention as broadly claim requires only that a first signal and a second signal prior to being combined in a combiner be respectively amplified. Applicant's admitted prior art clearly shows in fig. 1 that prior to being combined in combiner "C", a first signal and a second signal are respectively amplified by respective amplification devices 10 and 12. Given such a disclosure, one skill in the art would have been motivated to amplify the inputs signals of Plonka's prior to being combined in combiner 124 for the reasons provided in the above rejection.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/
Primary Examiner
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